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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Docket Number (Optional) WFI CH 4 PRE-APPEAL BRIEF REQUEST FOR REVIEW I hereby certify that this correspondence is being deposited with the Filed Application Number United States Postal Service with sufficient postage as first class mail 10/785 434 2/24/2004 in an envelope addressed to "Mail Stop AF, Commissioner for Patents. P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] First Named Inventor David Arthur Welch Signature Art Unit Examiner Typed or printed 2456 Richard Keehn name Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. I am the applicant/inventor. / Brett Bornsen/ Signature assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. Brett Bornsen (Form PTO/SB/96) vped or printed name | x | attorney or agent of record. 303-786-7687 Registration number 46566 Telephone number attorney or agent acting under 37 CFR 1.34. 3-8-2011

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forms are submitted.

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Welch

Application No.: 10/785,434 Art Unit.: 4121

Filed: 2/24/2004 Examiner: Keehn, Richard For: DISTRIBUTED MONITORING IN A TELECOMMUNICATIONS SYSTEM

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Commissioner for Patents P. O. Box 1450

Alexandria, VA 22313-1450

#### PRE-APPEAL BRIEF

## **Introductory Comments**

In response to a final Office action (final OA) dated December 8, 2010, and pursuant to the Notice of Appeal and the required fee filed concurrently herewith, please consider the following remarks.

# Remarks

The Appellants assume that the Panel has reviewed the pending claims. The Appellants will first discuss claim 1, which recites a telecommunications system. The system includes peer communication devices that collect performance data responsive to handling telecommunications data, and transfer the performance data to a control system. The control system processes the performance data from each of the peer communication devices to generate a performance file that indicates the performance of each of the peer communication devices, and transfers the performance file to the peer communication devices. Each of the peer communication devices then processes the performance file to compare its performance to the performance of the other peer communication devices to detect a fault. Responsive to detection of the fault, one (or more) of the peer communication devices processes the performance file to identify a recovery action, and performs the recovery action to attempt to cure the fault.

According to claim 1, the peer communication devices evaluate their own performance based on the performance file sent by the control system. More particularly, a peer communication device processes the performance file to compare its performance to the

performance of the other peer communication devices to detect a fault, and performs a recovery action to attempt to cure the fault. This is what the Appellants refer to as "distributed monitoring" because the peer communication devices are monitoring their own performance based on the performance file provided by the control system. As some background for the Panel, traditional system monitoring was performed by a centralized server that collected performance data from communication devices, analyzed the performance data to detect faults, and tried to fix the faults. Thus, it was the centralized server which evaluated the performance of the communication devices and detected the faults; not the communication devices themselves. Claim 1 recites the peer communication devices evaluating their own performance and attempting to cure faults.

The Examiner rejected claim 1 under 35 USC § 103(a) as being obvious in view of U.S. Patent Application Publication 2005/0065753 (Bigus) and U.S. Patent Application Publication 2003/0039352 (El-Fakih). The Appellants disagree, and will show that the cited references fail to teach multiple limitations of claim 1.

First, the Appellants submit that the cited references fail to teach a control system that "processes the performance data from each of the peer communication devices to generate a performance file that indicates the performance of each of the peer communication devices, and transfers the performance file to each of the peer communication devices" as recited in claim 1. The Appellants described Bigus in a response to an Office action dated June 23, 2010. As a high level overview, Bigus describes a centralized monitoring system that receives and stores metric data sent by clients. See FIG. 4 and ¶ [0062]. If the monitoring system wants to evaluate the performance of a client or the system as whole, then the monitoring system compares the metric data against fuzzy sets and fuzzy rules. See FIG. 4 and ¶ [0066]. The monitoring system may then provide the results to a system administrator through a GUI. See FIG. 4 and ¶ [0072]. Thus, Bigus describes a centralized monitoring system that receives performance data (metric data) from clients, analyzes the performance data to evaluate the performance of the network, and provides the analysis to a system administrator.

EI-Fekih describes a centralized server (e.g., a service management system) that collects performance data from network elements. See ¶ [0006-0007]. The centralized server analyzes the performance data for the network elements against performance requirements that were guaranteed to customers to verify that customers are receiving the level of quality that they

expected. El-Fekih also states that a client (customer) may request a report verifying that they are receiving the level of quality that they expected. See ¶ [0010]. The report may also be used by the service provider to repair or reconfigure network resources. See ¶ [0010]. Thus, El-Fekih describes a centralized monitoring system that receives performance data from network elements, analyzes the performance data to determine the overall performance of the network, and provides a report to a customer or a service provider indicating whether or not the agreed-to service levels are being provided.

In both Bigus and El-Fekih, performance data for devices are reported to a centralized server, and the centralized server analyzes the performance data to evaluate the performance of the network. The results of the evaluation may then be provided to a system administrator (Bigus), or to a service provider or customer (El-Fekih). However, neither reference describes that a centralized server aggregates the performance data into a performance file, and sends the performance file to the very devices which submitted the performance data in the first place. In Bigus, the client devices compile metric (performance) data, and provide the metric data to the centralized server. See ¶ [0061]. The centralized server in Bigus evaluates the metric data from the client devices, but never returns a performance file back to the client devices which submitted the metric data. See ¶ [0066]. The centralized server in Bigus only displays some type of output on a GUI to a system administrator. See ¶ [0072]. And, there is no indication in Bigus that the output displayed to the system administrator is a file which includes the performance data for each of the client devices.

In El-Fekih, network elements (34a-f) send performance data to a centralized server (service management system 24). See FIG. 1 and ¶ [0075]. The centralized server in El-Fekih compares the performance data to service quality requirements agreed to by the service provider, but never returns a performance file back to the network elements which submitted the performance data. See ¶ [0075]. The centralized server in El-Fekih only provides a report to the service provider or a customer indicating whether the service quality requirements have been reached. For example, a customer may subscribe to service class of constant bit rate (CBR), and the report may indicate whether the service quality requirements for the service class are being reached. See ¶ [0038]. However, El-Fekih never states that the centralized server provides a performance file to each of the network elements that submitted the performance data. And, there is no indication in El-Fekih that the report sent to the service provider or the customer is a

file which includes the performance data for each of the network elements.

Again, the claim limitation at issue reads a control system that "transfers the performance file to each of the peer communication devices", where the performance file "indicates the performance of each of the peer communication devices". Both Bigus and El-Fekih describe communication devices that submit performance data to a centralized server, but neither of these references describes the centralized server transferring a performance file back to each of the communication devices, where the performance file indicates the performance of each of the communication devices. Therefore, the combination of these references cannot teach a control system as recited in claim 1.

Secondly, the Appellants submit that the cited references fail to teach that "each of the peer communication devices...processes the performance file to compare its performance to the performance of the other peer communication devices to detect a fault" as recited in claim 1. As described above, neither of the references teaches that a centralized server sends a performance file back to the communication devices which submitted the performance data. Therefore, the cited references cannot teach communication devices that process a performance file (indicating the performance of each of the communication devices) to detect a fault. In rejecting this limitation, the Examiner cites to El-Fekih. See page 6 of the final OA. The Examiner's reliance on El-Fekih is flawed because El-does not describe a centralized server that returns a performance file to communication devices. Thus, the communication devices in El-Fekih do not have a performance file with which to "compare its performance to the performance of the other peer communication devices to detect a fault". The Examiner cites to paragraph [0113], which actually teaches away from this claim limitation. Paragraph [0113] in El-Fekih states that:

a service management system may be used to retrieve quality of service information from a network, analyze that information, and compare the analyzed information against defined service or conformance thresholds to determine whether the network is performing up to expectations. If the network is deficient in some way, then a client, such as a service provider or customer, may be notified to allow the client to take corrective action by, for example, reshaping the traffic on the network.

As a reminder, the service management system is the centralized server (see FIG. 1) in EI-Fekih which receives performance data from the network elements (e.g., 34a-e). It is the service management system in EI-Fekih that analyzes the performance data. The network elements in EI-Fekih do not receive a performance file from the service management system, and

do not compare their performance against other network elements. El-Fekih clearly states that the service management system analyzes the performance data; not the network elements. Thus, the Examiner's cite supports the position set forth by the Appellants.

Third, the Appellants submit that the cited references fail to teach "at least one of the peer communication devices processes the performance file to identify at least one recovery action, and performs the at least one recovery action to attempt to cure the fault" as recited in claim 1. The communication devices in El-Fekih do not have a performance file with which to "identify at least one recovery action" and to "attempt to cure the fault". Due to the page limitations on this Brief, the Appellants will not comment further on this limitation as El-Fekih clearly teaches away from having the network elements perform a recovery action to attempt to cure the fault. See ¶ [0113], where a service provider or customer may take corrective action, not a network element.

The Appellants conclude by adding that it appears that the Examiner is finding references throughout the course of prosecution that include words such as "performance data", "peer", "fault", "distributed", etc., without really considering what the references are teaching. The Appellants have shown the Panel that the Examiner's rejections are insufficient regarding claim 1 based on the remarks above. Similar arguments apply for the other claims.

## Conclusion

The Appellants ask the Panel to find the present rejection insufficient, and allow the pending claims for at least the reasons provided above.

Respectfully submitted,

Date: 3-8-2011

## /BRETT BORNSEN/

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